



US005324922A

# United States Patent [19]

Roberts

[11] Patent Number: 5,324,922

[45] Date of Patent: Jun. 28, 1994

**[54] APPARATUS AND METHOD FOR MANAGING TRANSACTIONS**

[75] Inventor: Alan B. Roberts, Palo Alto, Calif.

[73] Assignee: Verifone, Inc., Redwood City, Calif.

[21] Appl. No.: 22,129

[22] Filed: Feb. 25, 1993

[51] Int. Cl. 5 G06F 15/20

[52] U.S. Cl. 235/375; 235/379;  
235/462; 235/472[58] Field of Search 235/462, 472, 375, 379,  
235/383; 364/401**[56] References Cited****U.S. PATENT DOCUMENTS**

4,475,153	10/1984	Kihara et al.	235/463
4,521,678	6/1985	Winter	235/462
4,654,482	3/1987	DeAngelis	379/95
4,682,014	7/1987	Iwama	235/375
4,734,858	3/1988	Schlafly	235/380
4,947,028	8/1990	Gorog	235/380
4,954,699	9/1990	Coffey et al.	235/375
4,978,305	12/1990	Kraft	235/472
5,047,614	9/1991	Bianco	235/462

**FOREIGN PATENT DOCUMENTS**

21784 3/1989 Australia ..... 235/383

*Primary Examiner—John Sheppard*  
*Attorney, Agent, or Firm—Lowell C. Bergstedt***[57] ABSTRACT**

Apparatus for managing a transaction using a transaction terminal having a manual code reading device,

such as a barcode reader, for reading a data code printed on a visual medium. A transaction program forming part of the system includes at least one page of a visual medium having a first and second sets of data codes printed thereon. The first set of data codes is printed in a prearranged sequence and comprises a predetermined sequence of program commands for carrying out all of the steps of a prearranged transaction, including a subset of program commands associated with a corresponding subset of data entry steps. The second set of data codes is printed on the same or another page of said visual medium. Each of the data codes in the second set comprises a prearranged item of transaction data for use in said data entry steps. The transaction terminal includes a computer means interfaced to said manual code reading means. This computer means including a program storage device and a data storage device. The program storage device stores both a command management program for managing the sequential entry and execution of said program commands and a set of command execution routines. Each of the command execution routines is associated with one of said program commands. The set of command execution routines including at least one data entry routine which, in turn, includes program steps for reading one of said second set of said data codes and storing the transaction data contained therein in said data storage means. The terminal has a modem for communicating the stored transaction data to a remote host.

17 Claims, 13 Drawing Sheets

